

## RAW SEQUENCE LISTING

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Application Serial Number: 10/SOI 223  
Source: Pkt  
Date Processed by STIC: 3-22-05

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PCT

## RAW SEQUENCE LISTING

DATE: 03/22/2005

PATENT APPLICATION: US/10/501,223

TIME: 10:12:07

Input Set : A:\05081107.app

Output Set: N:\CRF4\03222005\J501223.raw

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3 <110> APPLICANT: GUILLON, CHRISTOPHE
4   CHEDAL-BORNU, AURELIE
5   VERRIER, BERNARD
6   MANDRAND, BERNARD
8 <120> TITLE OF INVENTION: HIV-1 VIRUS TAT PROTEIN MUTANTS
10 <130> FILE REFERENCE: 0508-1107
12 <140> CURRENT APPLICATION NUMBER: 10/501,223
13 <141> CURRENT FILING DATE: 2004-07-12
15 <150> PRIOR APPLICATION NUMBER: PCT/FR03/00051
16 <151> PRIOR FILING DATE: 2003-01-09
18 <150> PRIOR APPLICATION NUMBER: FR 02/00319
19 <151> PRIOR FILING DATE: 2002-01-11
21 <160> NUMBER OF SEQ ID NOS: 141
23 <170> SOFTWARE: PatentIn version 3.3
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 101
27 <212> TYPE: PRT
28 <213> ORGANISM: Human immunodeficiency virus type 1
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34 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
35          20          25          30
37 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
38          35          40          45
40 Arg Lys Lys Arg Arg Gln Arg Arg Arg Ser Pro Gln Asp Ser Glu Thr
41          50          55          60
43 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
44 65          70          75          80
46 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu
47          85          90          95
49 Thr Asp Pro Val Asp
50          100
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54 <211> LENGTH: 101
55 <212> TYPE: PRT
56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: Description of Artificial Sequence: K51T-R52L mutant
60   of Tat protein
62 <400> SEQUENCE: 2
63 Met Glu Pro Val Asp Pro Lys Leu Glu Pro Trp Lys His Pro Gly Ser
64 1          5          10          15

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66 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
67      20      25      30
69 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
70      35      40      45
72 Arg Lys Thr Leu Arg Gln Arg Arg Arg Ser Pro Gln Asp Ser Glu Thr
73      50      55      60
75 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
76 65      70      75      80
78 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu
79      85      90      95
81 Thr Asp Pro Val Asp
82      100
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87 <212> TYPE: PRT
88 <213> ORGANISM: Artificial Sequence
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91 <223> OTHER INFORMATION: Description of Artificial Sequence: K51T-R55L mutant
92   of Tat protein
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95 Met Glu Pro Val Asp Pro Lys Leu Glu Pro Trp Lys His Pro Gly Ser
96 1      5      10      15
98 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
99      20      25      30
101 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
102      35      40      45
104 Arg Lys Thr Arg Arg Gln Leu Arg Arg Ser Pro Gln Asp Ser Glu Thr
105      50      55      60
107 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
108 65      70      75      80
110 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu
111      85      90      95
113 Thr Asp Pro Val Asp
114      100
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119 <212> TYPE: PRT
120 <213> ORGANISM: Artificial Sequence
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123 <223> OTHER INFORMATION: Description of Artificial Sequence: K51T-R57L
124   mutant of Tat protein
126 <400> SEQUENCE: 4
127 Met Glu Pro Val Asp Pro Lys Leu Glu Pro Trp Lys His Pro Gly Ser
128 1      5      10      15
130 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
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133 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
134      35      40      45
136 Arg Lys Thr Arg Arg Gln Arg Arg Leu Ser Pro Gln Asp Ser Glu Thr

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137      50      55      60
139 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
140 65      70      75      80
142 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu
143      85      90      95
145 Thr Asp Pro Val Asp
146      100
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152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Description of Artificial Sequence: K51T-G79A
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158 <400> SEQUENCE: 5
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160 1      5      10      15
162 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
163      20      25      30
165 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
166      35      40      45
168 Arg Lys Thr Arg Arg Gln Arg Arg Arg Ser Pro Gln Asp Ser Glu Thr
169      50      55      60
171 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Ala Asp
172 65      70      75      80
174 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu
175      85      90      95
177 Thr Asp Pro Val Asp
178      100
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183 <212> TYPE: PRT
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186 <220> FEATURE:
187 <223> OTHER INFORMATION: Description of Artificial Sequence: K51T-K89L
188      mutant of Tat protein
190 <400> SEQUENCE: 6
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194 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
195      20      25      30
197 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
198      35      40      45
200 Arg Lys Thr Arg Arg Gln Arg Arg Arg Ser Pro Gln Asp Ser Glu Thr
201      50      55      60
203 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
204 65      70      75      80
206 Pro Thr Gly Pro Lys Glu Ser Lys Leu Lys Val Glu Arg Glu Thr Glu
207      85      90      95

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210      100
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219 <223> OTHER INFORMATION: Description of Artificial Sequence: K51T-E92Q
220      mutant of Tat protein
222 <400> SEQUENCE: 7
223 Met Glu Pro Val Asp Pro Lys Leu Glu Pro Trp Lys His Pro Gly Ser
224 1      5      10      15
226 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
227      20      25      30
229 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
230      35      40      45
232 Arg Lys Thr Arg Arg Gln Arg Arg Arg Ser Pro Gln Asp Ser Glu Thr
233      50      55      60
235 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
236 65      70      75      80
238 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Gln Arg Glu Thr Glu
239      85      90      95
241 Thr Asp Pro Val Asp
242      100
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246 <211> LENGTH: 101
247 <212> TYPE: PRT
248 <213> ORGANISM: Artificial Sequence
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251 <223> OTHER INFORMATION: Description of Artificial Sequence: R52L-R55L
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254 <400> SEQUENCE: 8
255 Met Glu Pro Val Asp Pro Lys Leu Glu Pro Trp Lys His Pro Gly Ser
256 1      5      10      15
258 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
259      20      25      30
261 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
262      35      40      45
264 Arg Lys Lys Leu Arg Gln Leu Arg Arg Ser Pro Gln Asp Ser Glu Thr
265      50      55      60
267 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
268 65      70      75      80
270 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu
271      85      90      95
273 Thr Asp Pro Val Asp
274      100
277 <210> SEQ ID NO: 9
278 <211> LENGTH: 101
279 <212> TYPE: PRT

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Output Set: N:\CRF4\03222005\J501223.raw

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280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: Description of Artificial Sequence: R52L-R57L
284     mutant of Tat protein
286 <400> SEQUENCE: 9
287 Met Glu Pro Val Asp Pro Lys Leu Glu Pro Trp Lys His Pro Gly Ser
288 1           5           10           15
290 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
291           20           25           30
293 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
294           35           40           45
296 Arg Lys Lys Leu Arg Gln Arg Arg Leu Ser Pro Gln Asp Ser Glu Thr
297           50           55           60
299 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Gly Asp
300 65           70           75           80
302 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu
303           85           90           95
305 Thr Asp Pro Val Asp
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310 <211> LENGTH: 101
311 <212> TYPE: PRT
312 <213> ORGANISM: Artificial Sequence
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Description of Artificial Sequence: R52L-G79A
316     mutant of Tat protein
318 <400> SEQUENCE: 10
319 Met Glu Pro Val Asp Pro Lys Leu Glu Pro Trp Lys His Pro Gly Ser
320 1           5           10           15
322 Gln Pro Lys Thr Ala Cys Asn Asn Cys Tyr Cys Lys Lys Cys Cys Phe
323           20           25           30
325 His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly
326           35           40           45
328 Arg Lys Lys Leu Arg Gln Arg Arg Arg Ser Pro Gln Asp Ser Glu Thr
329           50           55           60
331 His Gln Val Ser Leu Ser Lys Gln Pro Ala Ser Gln Pro Arg Ala Asp
332 65           70           75           80
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335           85           90           95
337 Thr Asp Pro Val Asp
338           100
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342 <211> LENGTH: 101
343 <212> TYPE: PRT
344 <213> ORGANISM: Artificial Sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: Description of Artificial Sequence: R52L-K89L
348     mutant of Tat protein
350 <400> SEQUENCE: 11

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VERIFICATION SUMMARY

DATE: 03/22/2005

PATENT APPLICATION: US/10/501,223

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